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Sage publication

1 December 2007

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Margin: The Journal of Applied Economic Research 2007; 1; 383
DOI: 10.1177/097380100700100403

Margin—The Journal of Applied Economic Research 1 : 4 (2007): 383–401
SAGE Publications Los Angeles/London/New Delhi/Singapore
DOI: 10.1177/097380100700100403

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It has long been recognised that public sector jobs are an attractive opportunity (because of job security, fringe benefits, and so on) in Pakistan's labour market. Since the early 1990s, Pakistan has been going through an economic restructuring plan, particularly in terms of privatisation. The aim of this paper is to examine the change in the phenomenon of 'wait unemployment' created due to preference for public sector jobs, using cross-section labour force surveys for 2001–02, 2003–04 and 2005–06. This hypothesis has been examined earlier only for 2001–02 (Hyder 2007). The evidence supported the view that unemployed people in Pakistan prefer public sector jobs, and due to this preference they remain unemployed for a particular period of time. However, the duration is uncompleted in nature. This study will provide an update on changing trends in job preferences among unemployed individuals based on two more recent nationwide Labour Force Surveys, for 2003–04 and 2005–06.

Keywords: *Wage Differentials, Wage Structure, Unemployment Models, Duration and Job Search*
JEL Classification: *J31, J64*

1. Introduction

The well-known Washington Consensus, presented by economist John Williamson as a joint policy advice proposed by Washington-based institutions like the World Bank and the International Monetary Fund (IMF), is for the economic recovery of Latin American countries from financial crisis. 'Privatisation, liberalisation and stabilisation' are the fundamentals of the

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Acknowledgements: The author is grateful to Dr Dilawar Ali Khan, DG, NIMS, for his encouragement. However, the author remains responsible for any errors in this paper. The views expressed in this paper are those of the author and do not necessarily reflect the view of NUST Institute of Management Sciences, Rawalpindi.

Washington Consensus. As in many other developing countries, the Social Action Program (SAP) in Pakistan is also heavily influenced by the policies suggested by the Washington twins. The privatisation process in Pakistan started actively after the creation of the Privatization Commission in January 1991 (Privatization Commission 2005).

A fact long recognised by our technocrats and politicians is that privatisation is a key element in the agenda of economic growth as it embraces deregulation and liberalisation of the economy. Hyder (2007a) examined wage differentials between the public and private sectors and preferences for public sector jobs in Pakistan. The finding was that in spite of a reorientation of the economy towards the private sector, the competition for employment in the public sector remains keen,[1] and unemployed individuals are queuing for public sector jobs. This paper is an extension of the analysis to examine the structural change in public sector job preferences from 2001 to 2006 using three cross-section *Labour Force Surveys* (LFS), that is, 2001–02, 2003–04 and 2005–06.

There is a modest amount of empirical literature for developed countries investigating the existence of a queue for public sector jobs. The primary motive for testing the existence of queues is to provide indirect evidence that public sector workers secure higher overall compensation (Gregory and Borland 1999). Poirier's (1980) bivariate probit with partial observability has been used to provide empirical evidence on the existence of public sector job queues (for example, see Abowd and Farber 1982). Mengistae (1999) modifies this approach to examine the evidence for such queues in Ethiopia's urban labour market. For a more detailed discussion on the existing literature on this topic, see Hyder (2002, 2007a), Hyder and Reilly (2005) and Nasir (1998, 2002).

Public sector jobs are considered attractive not only because of wage differentials and generous fringe benefits but also because of job security and the work environment. This paper examines the change in the length of the job queues between 2001–02 and 2004–05 by analysing public sector job preferences of a sample of unemployed individuals. Another objective of this paper is to study the relationship between public sector job preferences and an individual's duration o f unemployment (the present study hypothesised that the unemployment duration related to public sector jobs must decrease because of the changing trends of the economy towards the private competitive sector). In short, by using three most recent cross-sectional LFS, this paper will confirm the hypothesis that

[1] Public sector jobs are more attractive because of fringe benefits; these views are discussed briefly in Bilquees (2006).

public sector job preference is a function of the public–private wage gap and that job preferences endogenously influence an individual's unemployment duration.

2. Data

This study uses cross-section data drawn from the nationally representative Pakistan LFS for 2001–02, 2003–04 and 2005–06. The working sample used for 2001–02 in wage analysis is based on those in wage employment and comprises a total of 7,004 workers; the working sample comprises 6,142 workers for 2003–04 and 10,389 for 2005–06. The proportion of employees in the public and private sectors is given in Table 1.

Table 1 Proportion of Public and Private Sector Workers in Sample

(per cent)

Year	*Private*	*Public*
2001–02	52.7	47.3
2003–04	47.5	52.5
2005–06	45.0	55.0

The public sector includes federal government, provincial governments and local bodies. The private sector is defined here to include workers employed in private companies, cooperative societies, individual ownerships and partnerships. It is sometimes argued that in an analysis of the public/private sector pay gap in developing countries, it is desirable to disaggregate the private sector into formal and informal sectors.[2] This is largely a matter of the investigator's preference and our approach is to retain a sufficiently broad definition of the private sector. Any disaggregation of the private sector along such lines is likely to be prone to potential misclassification and measurement error (Hyder and Reilly 2005), and is thus eschewed in this study.

The data collection for the LFS is spread over four quarters of the year in order to capture any seasonal variations in activity. The survey covers all the urban and rural areas of the four provinces of Pakistan, as defined by the 1998 Census. The LFS excludes the Federally Administered Tribal Areas (FATA), military restricted areas, and protected areas of the NWFP. These exclusions

[2] This was the approach adopted by Nasir (2000) using data drawn from an earlier round of the LFS.

are not seen as significant since the relevant areas account for about 3 per cent of the total population of Pakistan.

2.1 Variables and their Construction

Table A1 (Appendix) presents definitions of the variables used in this analysis. The natural logarithm of the hourly wage[3] is used as the dependent variable because hours worked varies over the life cycle with the level of education and may also vary across sectors. Wages for the unemployed are predicted after estimating a regression equation on wages of employed individuals with given demographics and characteristics.

In order to examine the relationship between earnings and age from the perspective of human capital theory, age and its quadratic are used in the specifications. These measures are actually designed to proxy for labour force experience, which cannot be accurately measured using our data source. This analysis is restricted to those aged between 15 and 60 years. The age-restricted approach provides a more worthwhile comparison between public and private sector workers, given the public sector retirement age. The marital status of a respondent is divided into two categories, married and never married. The category 'never married' includes all individuals who have never married, or are widowed or divorced. The settlement type where the individual resides is captured by a binary control for residing in an urban area. Four regional controls are included and these capture the four provinces in Pakistan—Punjab, Balochistan, Sind and the NWFP. Again, a binary control is introduced to capture the relocation effect of a respondent's time spent in the current district. The notion here is that location-specific human capital and social networks may be important in the wage determination process, particularly in the private sector.

Six categories are introduced to examine the effects of education. The highest category is 'degree' which comprises everyone who has a college degree, a master's degree, an M.Phil or Ph.D. The category for training shows if individuals have received any type of training, although our approach does not distinguish between on-the-job or specific training.

2.2 Summary Statistics

Tables A2 and A3 (Appendix) present details of all the variables with their summary statistics for employed individuals in each sector of economy and unemployed individuals, respectively.

[3] The hourly wages, expressed in rupees, were calculated by dividing weekly earnings by number of hours worked per week.

Female labour force participation is low in Pakistan. On the basis of our sample, in 2001–02 and 2003–04, only 12 per cent of public sector and about 10 per cent of waged employees in the private sector were women. This figure increased to 15 per cent in the private sector during 2005–06. The inclusion of women in our empirical analysis is a judgment call. The proportion of employed individuals in the private sector increased significantly in the sample, particularly in Punjab and Sindh in 2005–06 compared to 2001–02. An increasing trend of relocation can also be discerned due to a 4 per cent decrease in the number of people living in that district since birth.

There is significant increase in the proportion of unemployed individuals with maximum duration,[4] that is, more than 12 months. Similarly, the proportion of relocated individuals increased among the sample of unemployed. The proportion of unemployed (without any preference) has increased in all provinces, with the highest increase in Sindh. The proportion of heads of households among unemployed individuals decreased in the total sample.

3. Methodology

The approach adopted in this paper is the same as used by Hyder (2007b) and, for convenience, the methodology is reported here in brief.[5] Our econometric model comprises two equations: a public sector job preference equation and an unemployment duration equation. Assume y^*_{1i} is a latent variable that captures an individual's preference for a public sector job. It is assumed to be related to a set of explanatory variables (x_i) using the following relationship:[6]

$$y^*_{1i} = x'_1\beta + u_i \qquad \text{where } u_i \sim N(0, 1) \tag{1}$$

The x_i vector is assumed to include the individual's predicted wage offer gap between a public and private sector job. Let y_{1i} denote an observable binary variable that conveys information on whether an individual has a preference for a public sector job, which is denoted as $y_{1i} = 1$ if this is the case, and $y_{1i} = 0$ if not. The relationship between the latent variable and the observed variable is

[4] This duration is uncompleted in nature.

[5] The same model specification is used by Hyder in her Ph.D. dissertation.

[6] The wage equations estimated in this paper are not corrected for selectivity bias, because of the unavailability of instrumental variables for identification in LFS. In previous studies by the same author, the head of household is used for identification, but this variable is significant when used in the wage equation. Family background or parental background information are best for such analysis as suggested by Heckman (1979), but these are not available in the LFS.

given by $y_{1i} = 1$ if $y^*_{1i} > 0$, and $y_{1i} = 0$ if $y^*_{1i} \leq 0$. This application can be formulated as a simple binary probit model and the specification of the log likelihood function is now discussed.

The model described in equation (1) shows that the probability of preferring a public sector job is $\Phi(x'\beta)$ and independent observations lead to the joint probability, or likelihood function,

$$Prob\ (Y_{1i=1,\,2,\,\ldots n}|x) = \prod_{y1i=0}[1-\Phi(x_i'\beta)]\prod_{y1i=1}\Phi(x_i'\beta) \tag{2}$$

The likelihood function for a sample of n observations can be written as:

$$\mathrm{L}\ \langle \beta \,|data\rangle = \prod_{i=1}^{n}[\Phi(x_i'\beta)]^{y1i}\,[1-\Phi\,(x_i'\beta)]^{1-y1i} \tag{3}$$

By taking the log of the above equation, we obtain the following log likelihood equation:

$$lnL = \sum_{i=1}^{n}\{y_{1i}\ ln\ \Phi(x_i'\beta) + (1-y_{1i})\ ln\ [1-\Phi(x_i'\beta)]\} \tag{4}$$

$\Phi(\cdot)$ represents the cumulative distribution function for the standard normal.

The unemployment duration variable is expressed in discrete intervals measured in months. Let y^*_{2i} denote an underlying latent dependent variable that captures the ith individual's unemployment duration. This can be expressed as a linear function of a vector of explanatory variables (z_i) using the following relationship:

$$y^*_{2i} = z_i'\gamma + e_i \quad \text{where } e_i \sim N(0, \sigma^2) \tag{5}$$

It is assumed that y^*_{2i} is related to the observable ordinal variable y_{2i} as follows:

$$\begin{aligned}
y_{2i} &= 0 \ \text{ if } && -\infty < y^*_{2i} \leq a_1 \\
y_{2i} &= 1 \ \text{ if } && a_1 < y^*_{2i} < a_2 \\
y_{2i} &= 2 \ \text{ if } && a_2 \leq y^*_{2i} < a_3 \\
y_{2i} &= 3 \ \text{ if } && a_3 \leq y^*_{2i} < a_4 \\
y_{2i} &= 4 \ \text{ if } && a_4 \leq y^*_{2i} < +\infty
\end{aligned}$$

where a_j are known threshold values. This application can be formulated as an interval regression (or grouped dependent variable) model and the specification of the log likelihood function can be written as:

$$\log L = \sum_{j=0}^{4} \sum_{i \in k} \log\{\Phi[\frac{a_k - Z_i'\beta}{\sigma}] - \Phi[\frac{a_{k-1} Z_i'\beta}{\sigma}]\} \quad (6)$$

Following Stewart (1983), we treat the first and the last intervals as open-ended in this case; so for $j = 0, \Phi(a_j) = \Phi(-\infty) = 0$, and for $j = 4, \Phi(a_j) = \Phi(+\infty) = 1$, where $\Phi(\cdot)$ denotes the cumulative distribution function for the standard normal.

4. Results and Discussions

The estimated results are discussed in order.

4.1 Wage Equations

The primary purpose for estimation of wage equations (results presented in Table A 4, Appendix) is as a prediction of wages for unemployed individuals in job queues. Thus, our model specification does not include the occupational categories because we do not have information about occupational preferences of the unemployed. Starting from gender, the estimated effect of being male in the private sector was 0.49 percentage points in 2001–02; it decreased to 0.40 percentage points in 2005–06. This shows the decrease in gender wage discrimination in the private sector. 'Age' and 'age square' are used as proxies for experience. These two variables have expected signs and magnitudes that are consistent with the theory.

The estimated effects of all educational categories remain almost unchanged in the public sector, but fell slightly in the private sector in 2002–03 and increased in 2005–06. To capture the residential effect, our model includes four provincial dummies and one urban dummy. The estimated effect of the category 'Punjab' decreased for the private sector, which shows the changing trends of expansion and competitiveness in this sector in Punjab compared to the omitted category 'Balochistan'. The estimated coefficients for NWFP are difficult to interpret for 2005–06, and the ambiguous results are clearly an outcome of the drastic conditions in the province after the September 2005 earthquake in the northern areas of Pakistan.

4.2 Job Preference Equations: Probit Estimates

Table A5 (Appendix) presents the results of job preference equations for three years, 2001–02, 2003–04 and 2005–06. The coefficient of 'wage differential' is positive and significant in all three years, in all job preference equations. This shows that wage differentials between the public and private sectors play an important role in an unemployed individual's job preferences in Pakistan. The public sector in Pakistan is generally considered inefficient because it is overstaffed. The immediate impact of privatisation and the consequences of private sector unemployment due to downsizing are unavoidable. This is responsible for increasing fears of job loss, particularly in the private sector (see Khan [2003] for a more detailed discussion on the impact of privatisation on employment). There is a modest amount of literature available supporting the statement that in the short run, privatisation grounds unemployment and fall in wages (Gupta et al. 1999). The time period under consideration in this study does not show any significant change in job preference from the public sector to the private sector.

In Punjab, the probability of preferring a public sector job is lower than in Balochistan, which is an omitted category. This result seems logical, based on the competition for public sector jobs in Punjab and a more established private sector there which can absorb unemployed individuals. These two factors provide a significant explanation for low public sector job preferences as compared to Balochistan.

4.3 Length of Job Queues: Interval Regression Estimates

Table A5 (Appendix) presents interval regression estimates. There are few significant changes in the results between 2001–02 and 2005–06. For all three years, with the increase in the level of education, the duration of unemployment also increases. This is because as the level of education increases, the expectation of getting a suitable or desired job also increases. With higher levels of education, people expect to get better jobs and so they prefer to remain unemployed for a specific period of time and spend this time in job search. It is recognised that there are many other causes of lengthening job queues.[7] But these job preferences

[7] A comment by Dr Surjit Bhalla (Oxus Research and Investment, India) on an earlier version of this paper presented at the 22nd Annual General Meeting and Conference, 2006), was that an important factor in lengthening job queues may be corruption, bribery, etc. The author agrees with this point but the unavailability of information on this variable in our data set prevented us from exploring the effects of this variable. Thus, this study is restricted to the analysis of the duration of unemployment due to job preferences.

are an important cause of lengthening the job queues or creating the phenomena of 'wait unemployment' in the economy. This is evident from our estimated results that individuals with a low level of education a have minimum duration of unemployment; this result is obvious as unemployed individuals with a low level of education may not have a strong job preference.

The preference for public sector jobs significantly affects the duration of unemployment. The estimated coefficient of this variable is about four months' duration due to job preference for 2001–02, which decreased to about three months in 2003–04, and further to about one month in 2005–06. These estimated results show a decrease in preferences for public sector jobs among the unemployed. Another explanation for the decrease in preference for public sector jobs may be the dearth of jobs in that sector. It is also pointed out by Gupta et al. (1999) that after privatisation, the immediate impact on the economy is a loss of employment, first due to downsizing and second when sufficient investment is not injected into the economy.

5. Conclusions

The study provides a relationship between job preferences and duration of unemployment. It provides a comparative analysis using three recent cross-section labour force surveys. The estimated results support the hypothesis that unemployed individuals prefer public sector jobs, the level of preferences increases in terms of duration of unemployment with the increase in the level of education.

Another main objective of this study is to provide a comparative analysis of three different surveys. The results do not show any significant change in job preference during the time period under consideration. The only significant change in the estimated results was for the NWFP which yielded an unclear coefficient for 2005–06, clearly because of low economic activity due to the 2005 earthquake in the region. The negligible differences in results for the three cross-section surveys may be because of too short a time period;[8] five years is a very short time to examine a structural changes in the economy.

[8] The unpublished Ph.D. dissertation by Yasmeen (2007) provides a comparative analysis of two labour force surveys, 1990–91 and 2001–02, to examine the change in employment opportunities due to trade liberalisation. Her statistics shows that there is no change in employment opportunities during this time period due to trade policies as these policies are part of the structural adjustment program in Pakistan.

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Appendix

Table A1 Variable Descriptions

Variable		*Description*
Job Preference	=	1 if the individual expresses a preference for a public sector job; = 0 otherwise.
Unemployment Duration		This is an interval coded variable where:
DUR_1		Unemployment Duration < One month.
DUR_2		One month ≤ Unemployment Duration < two months.
DUR_3		two months ≤ Unemployment Duration < seven months.
DUR_4		seven months ≤ Unemployment Duration < twelve months.
DUR_5		Unemployment Duration ≥ twelve months.
Since Birth	=	1 if the individual was born in the district they currently reside in; = 0 otherwise.
Male	=	1 if the individual is male; 0 = female.
Age		The age of the respondent expressed in years.
Head	=	1 if the individual is the head of household; = 0 otherwise.
No Formal Education	=	1 if the individual has no formal educational qualifications; = 0 otherwise.
Primary	=	1 if the individual's highest qualification is to primary level (five years of education); = 0 otherwise.
Middle	=	1 if the individual's highest qualification is to middle level (eight years of education); = 0 otherwise.

(*Table A1 contd*)

(*Table A1 contd*)

Variable	*Description*
Matriculation	= 1 if the individual's highest qualification is to matriculation (ten years of education); = 0 otherwise.
Intermediate	= 1 if the individual's highest qualification is to two years of college (twelve years of education); = 0 otherwise.
Degree	= 1 if the individual's highest qualification is a university degree (including professional and postgraduate); = 0 otherwise.
Training	
Urban	= 1 if the individual resides in an urban area; = 0 otherwise.
Balochistan	= 1 if the individual resides in Baloch; = 0 otherwise.
Punjab	= 1 if the individual resides in Punjab; = 0 otherwise.
Sindh	= 1 if the individual resides in Sindh; = 0 otherwise.
NWFP	= 1 if the individual resides in the North-West Frontier Province; = 0 otherwise.
Married	= 1 if the individual is married; = 0 otherwise
Wage Differential	This is computed as $X_i'[\beta_{public} - \beta_{private}]$ where X_i denotes the vector of characteristics for the ith individual and $\hat{\beta}_j$ denotes the vector of wage coefficients for the jth sector where j = public, private reported in Table A3.

Table A2 Summary Statistics for Employed Individuals (2001–02, 2003–04 and 2004–05)

	2001–002		*2003–04*		*2004–05*	
Variable	*Public Sector*	*Private Sector*	*Public Sector*	*Private Sector*	*Public Sector*	*Private Sector*
Male	0.880	0.906	0.881	0.872	0.886	0.854
Age	37.14	30.23	38	29.78	38.27	29.69
	(9.29)	(11.01)	(9.53)	(11.31)	(9.705)	(11.21)
Age Squared ÷ 100	14.66	10.35	15.28	10.14	15.59	10.07
	(7.15)	(7.65)	(7.44)	(7.85)	(7.53)	(7.78)
Primary	0.103	0.205	0.075	0.159	0.072	0.180
Middle	0.085	0.129	0.087	0.136	0.087	0.147
Matriculation	0.225	0.169	0.219	0.152	0.231	0.179
Intermediate	0.162	0.062	0.148	0.072	0.157	0.069
Degree	0.283	0.101	0.312	0.069	0.306	0.073
Urban	0.592	0.643	0.593	0.599	0.588	0.655
Training	0.066	0.043	0.059	0.052	0.043	0.026
Punjab	0.369	0.532	0.360	0.494	0.357	0.578
Sindh	0.270	0.277	0.248	0.298	0.449	0.396
NWFP	0.181	0.118	0.20	0.120	0.182	0.115
Married	0.855	0.554	0.847	0.518	0.839	0.526
Since Birth	0.827	0.786	0.790	0.825	0.781	0.790
Head	0.661	0.418	0.648	0.366	0.654	0.336
N	3,310	3,694	3,285	2,857	5,716	4,673

Table A3 Summary Statistics for Unemployed Individuals (2001–02, 2003–04 and 2004–05)

Variables	*2001–02*	*Job Preference = 1*	*Job Preference = 0*	*2003–04*	*Job Preference = 1*	*Job Preference = 0*	*2005–06*	*Job Preference = 1*	*Job Preference = 0*
Job Preference	0.452	1.000	0.000	0.486	1	0	0.498	1	0
Unemployment Duration									
DUR_1	0.139	0.078	0.190	0.114	0.081	0.145	0.095	0.084	0.107
DUR_2	0.249	0.182	0.305	0.205	0.141	0.265	0.134	0.107	0.160
DUR_3	0.206	0.179	0.229	0.190	0.151	0.227	0.189	0.166	0.211
DUR_4	0.136	0.133	0.138	0.147	0.148	0.145	0.171	0.156	0.186
DUR_5	0.270	0.429	0.138	0.343	0.477	0.215	0.409	0.484	0.334
Since Birth	0.869	0.876	0.864	0.842	0.877	0.809	0.849	0.876	0.821
Male	0.893	0.859	0.921	0.870	0.837	0.90	0.828	0.787	0.869
Age	26.186	24.178	27.845	25.028	23.85	26.14	25.38	23.93	26.82
	(9.97)	(7.30)	(11.48)	(9.08)	(6.425)	(10.91)	(9.590)	(6.58)	(11.68)
Head	0.206	0.130	0.269	0.159	0.088	0.227	0.164	0.110	0.219
NFE[†]	0.203	0.084	0.300	0.217	0.079	0.347	0.190	0.087	0.293

Primary	0.172	0.104	0.229	0.104	0.057	0.147	0.122	0.066	0.178
Middle	0.164	0.127	0.195	0.150	0.091	0.206	0.139	0.105	0.173
Matriculation	0.229	0.317	0.157	0.227	0.321	0.138	0.250	0.323	0.178
Intermediate	0.103	0.158	0.057	0.135	0.201	0.072	0.132	0.182	0.084
Degree	0.129	0.210	0.062	0.165	0.249	0.086	0.163	0.235	0.091
Train	0.043	0.049	0.038	0.065	0.074	0.056	0.046	0.053	0.038
Urban	0.516	0.550	0.488	0.553	0.532	0.572	0.557	0.574	0.540
Balochistan†	0.079	0.095	0.064	0.031	0.038	0.025	0.116	0.123	0.109
Punjab	0.400	0.363	0.431	0.401	0.340	0.459	0.411	0.369	0.454
Sindh	0.159	0.141	0.174	0.222	0.230	0.215	0.471	0.507	0.436
NWFP	0.362	0.401	0.331	0.344	0.390	0.3	0.217	0.233	0.201
Married	0.317	0.231	0.388	0.258	0.170	0.340	0.293	0.241	0.344
Sample Size	767	347	420	857	417	440	782	390	392

Note: † Stands for omitted category in the model specification.

Table A4 OLS Wage Equation Estimates for Sectoral Equations (2001–02, 2003–04 and 2005–06)

	2001–02		*2003–04*		*2005–06*	
Variables	*Public Sector*	*Private Sector*	*Public Sector*	*Private Sector*	*Public Sector*	*Private Sector*
Constant	2.065	0.936	2.068***	0.9577***	1.944***	1.6327
	(0.118)	(0.1095)	(0.135)	(0.113)	(0.122)	(0.121)
Male	0.086	0.496	0.048	0.445***	0.0601***	0.409***
	(0.027)	(0.0409)	(0.033)	(0.038)	(0.028)	(0.028)
Age	0.021	0.050	0.0242	0.052***	0.040***	0.049***
	(0.0065)	(0.0062)	(0.007)	(0.006)	(0.006)	(0.005)
Age Squared ÷ 100	–0.007	–0.052	–0.005	–0.06***	–0.029	–0.052***
	(0.0084)	(0.0083)	(0.009)	(0.009)	(0.008)	(0.007)
Primary	0.092	0.127	0.0436**	0.102***	0.062***	0.093***
	(0.029)	(0.025)	(0.034)	(0.031)	(0.030)	(0.024)
Middle	0.145	0.2166	0.102***	0.146***	0.127***	0.134***
	(0.029)	(0.029)	(0.034)	(0.034)	(0.030)	(0.025)
Matriculation	0.352	0.263	0.331***	0.221***	0.361***	0.187***
	(0.024)	(0.028)	(0.027)	(0.031)	(0.023)	(0.025)
Intermediate	0.504	0.4031	0.457***	0.274***	0.554***	0.339***
	(0.026)	(0.039)	(0.031)	(0.044)	(0.026)	(0.036)

Degree	0.876	1.015	0.833***	0.784***	0.928***	0.893***
	(0.027)	(0.043)	(0.027)	(0.055)	(0.024)	(0.046)
Urban	0.111	0.1414	0.106***	0.149***	0.131***	0.138***
	(0.016)	(0.021)	(0.018)	(0.023)	(0.015)	(0.019)
Train	0.087	0.082	0.070*	0.107***	–0.057	0.082***
	(0.039)	(0.048)	(0.047)	(0.031)	(0.039)	(0.048)
Punjab	–0.155	–0.242	–0.106***	–0.244***	–0.104***	–0.621***
	(0.021)	(0.034)	(0.023)	(0.039)	(0.019)	(0.077)
Sindh	–0.140	–0.117	–0.128*	–0.124***	–0.146***	–0.561***
	(0.022)	(0.037)	(0.024)	(0.041)	(0.021)	(0.077)
NWFP	–0.273	–0.326	–0.191***	–0.367***	0.006	–0.077***
	(0.025)	(0.053)	(0.024)	(0.049)	(0.023)	(0.032)
Married	0.033	0.060	0.074	0.086**	0.084	0.063**
	(0.027)	(0.030)	(0.028)	(0.032)	(0.027)	(0.025)
N	3,310	3,694	3,285	2,857	5,716	4,673
σ	0.4644	0.5773	0.5108	0.5744	0.5711	0.592
Adjusted R^2	0.3884	0.3394	0.3538	0.2464	0.3325	0.2537

Note: ***, **, * denote statistical significance at the 0.01, 0.05 and 0.1 levels, respectively, using two-tailed tests.

Table A5 Job Preference and Unemployment Duration Models

	Separate Stated Job Preference and Unemployment Duration Equations with Stated Job Preference as Exogenous Regressor					
	Stated Job Preference 2001–02	*Unemployment Duration 2001–02*	*Stated Job Preference 2003–04*	*Unemployment Duration 2003–04*	*Stated Job Preference 2005–06*	*Unemployment Duration 2005–06*
Constant	–0.249	4.134***	–0.187	3.981***	0.046	7.193***
	(0.197)	(0.917)	(0.277)	(0.921)	(0.139)	(1.055)
Since Birth	‡	–0.988	‡	0.778	‡	–0.154
		(0.764)		(0.790)		(0.911)
Head	‡	–1.836***	‡	–1.471**	‡	–0.831
		(0.649)		(0.743)		(0.946)
Primary	‡	1.108	‡	1.186	‡	0.692
		(0.828)		(0.936)		(1.036)
Middle	‡	1.442*	‡	1.403	‡	2.332*
		(0.842)		(0.887)		(1.117)
Matriculation	‡	2.996***	‡	2.909***	‡	2.547**
		(0.814)		(0.829)		(0.952)
Intermediate	‡	3.213***	‡	3.937***	‡	2.883*
		(1.018)		(1.035)		(1.146)
Degree	‡	4.130**	‡	3.893***	‡	3.196**
		(0.959)		(0.978)		(1.048)

Job Preference†	‡	3.596***	‡	2.985***	‡	1.553*
		(0.565)		(0.632)		(0.700)
Wage Differential	0.778**	‡	1.046***	‡	1.023***	‡
	(0.2.89)		(0.255)		(0.266)	
Urban	0.204**	‡	–0.091	‡	0.068	‡
	(0.094)		(0.089)		(0.093)	
Punjab	–0.418**	‡	–0.617**	‡	–0.783***	‡
	(0.179)		(0.266)		(0.210)	
Sindh	–0.383*	‡	–0.219	‡	–0.468**	‡
	(0.199)		(0.268)		(0.201)	
NWFP	–0.108	‡	–0.315	‡	–0.043	‡
	(0.178)		(0.269)		(0.135)	
Σ		6.536***		7.307***		7.934
		(0.244)		(0.247)		(0.932)
N	767	767	857	857	782	782
Log(L)	–518.19	–1362.4	–577.25	–1466.76	–530.98	–1233.29

Notes: (a) The estimates in column one are based on the estimation of a univariate probit model.
(b) The estimates in column two are based on the estimation of an interval regression model.
(c) ‡ denotes not used in estimation.
(d) ***, **, * denote statistical significance at the 0.01, 0.05 and 0.1 level, respectively, using two-tailed tests.
(e) † Our approach allowed 'Job Preference' to enter the unemployment duration model exogenously after applying the Durbin–Wu-Hausman test. The results of this test can be provided on request.